

# Notice of Allowability

Application No.

09/990,107

Examiner

Marc S. Zimmer

Applicant(s)

DAGA ET AL.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/04/03.
2. ☒ The allowed claim(s) is/are 8-21.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

***Election/Restrictions***

Applicant's election without traverse of group II in their response dated August 4, 2003 is acknowledged.

Claims 17-21 are hereby rejoined as they are directed to the wire having the allowable composition of claim 8 deposited thereon.

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Please cancel claims 1-7.

***Allowable Subject Matter***

Applicant claims a marking composition comprising (i) a fluoropolymer, (ii) a specified quantity of a colorless UV absorbing pigment, and (iii) a synergist adhering to the formula:



that is purported to enhance the contrast of a mark created when radiation impinges on selected areas of the composition. Relevant to the present discussion, component (iii) is made available in an amount corresponding to at least 10% by weight of the pigment.

The most relevant prior art is that disclosed in Birmingham et al., U.S. patent # 5,789,466, which was furnished by the Applicant. This reference also contemplates a

marking composition comprising a fluoropolymer host matrix,  $\text{TiO}_2$  pigment and a hydrolyzable silane as a treating for the pigment. Further, Birmingham provides for the utilization of aryl-substituted silanes where the aryl group represents the moiety that would be suitable for making a mark. However, whereas Applicant stipulates that the organosilicon compound should be present in an amount corresponding to at least 10% by weight of the pigment, the reference teaches a maximum silane concentration of 5 wt.% in column 5, lines 17-19, or half the lower limit presently advocated.

Claim 16, on the other hand, allows for compositions wherein the synergist is present in quantities as low as 0.1 wt. % relative to the pigment. Nonetheless, claim 16 also discloses the fluoropolymer as being polytetrafluoroethylene (PTFE). Birmingham teaches away from PTFE preferring instead copolymers of tetrafluoroethylene and other vinylic monomers that have a significantly lower melting point than PTFE.

The prior art contains many patent documents espousing the treatment of  $\text{TiO}_2$  with organosilicon compounds. See, for instance, Tooley et al., U.S. patent # 5,607,994, Mei et al., U.S. patent # 6,455,158, Burow et al., U.S. patent # 5,035,748, and Weber et al., U.S. patent # 6,214,106. However, like Birmingham, they generally recommend that the organosilicon compound is employed in quantities no higher than 5% by weight. Moreover, they often do not mention fluoropolymers as being among the polymer materials into which the treated  $\text{TiO}_2$  particles are incorporated nor does the prior art provide motivation of ordinary skill to replace the polymers mentioned in these references with a fluoropolymer.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 4, 2003



MARGARET G. MOORE  
PRIMARY PATENT EXAMINER  
ART UNIT 1712